

Comments on the Manomet Biomass Study
Ellen Moyer, Ph.D., P.E.
July 9, 2010

I am a registered professional engineer in four states with an M.S. in Environmental Engineering, a Ph.D. in Civil Engineering, and nearly 30 years of professional environmental engineering experience.

Dr. Mary Booth has completed a careful and thorough evaluation of the Manomet report, and her critique points out a number of misguided assumptions that were used in the study that skewed the results to underestimate the carbon impacts of biomass burning. The study should be revised using more realistic assumptions along the lines she suggests. It is important to get it right, because this ground-breaking study is likely to be relied upon nationally and internationally.

The rosy scenario assumptions are partially the outcome of DOER having selected a biased study team to conduct the analysis, one with deep and extensive ties to the slash and burn industry. The State should avoid making a similar mistake when selecting a study team for the upcoming construction and demolition wood burning health effects study.

Despite the flawed assumptions, no amount of lipstick could make the large wood-burning biomass plant pig look good. Slathering on of the lipstick made combined heat and power come out looking much better than it really is. This must be corrected to avoid future damage from such facilities.

The study should not only compare biomass burning to antiquated fossil fuel-burning technologies that are soon to be eclipsed, it should also compare biomass burning with combustion-free energy sources of the present and future – solar, wind, geothermal, tidal, etc. In addition to comparing the slide rule to the abacus, which is not very informative, let's compare the slide rule to the calculator or computer. It is just as important to ask the right questions as to come up with the right answers. Trees are the good guys. Since they take so long to grow back, we better be damn sure we are doing the right thing before cutting them down.

While I am heartened that the truth about large wood-burning biomass incinerators has finally been acknowledged, the study does not go far enough. Erroneous assumptions must be corrected and the report revised to provide objective and sound scientific analysis that can be relied upon for policy-making that is in the public's interests. DOER all along has said that the public will have the chance to provide input. Toward that end, the report must be revised to incorporate that public input which increases the scientific soundness of the evaluation.

The health effects of wood burning from air pollutants other than carbon dioxide also must be factored in when developing policies. This issue is not covered in the Manomet study. And again, any comparisons to other energy sources should include technologies of the future in addition to technologies of the past.

We also need to make sure that biomass burning does not usurp land or other resources for food production. With a billion people in the world hungry, it would be unethical to do so. Food is the ultimate highest value energy source, as it fuels human bodies. Food should trump energy for machines every time.

Massachusetts is really leading the way when it comes to biomass burning. I am incredibly proud of our State! If we get this right, we'll really be doing a major service for the entire world. We're a good part of the way there but need to do a bit more.

